

SEQUENCE LISTING

<110> VIVIER, ERIC
MORETTA, ALESSANDRO
OLCESE, LUCIA
VELY, FREDERIC
TOMASELLO, ELENA

<120> NEW POLYPEPTIDES ASSOCIATED WITH ACTIVATORY RECEPTORS
AND THEIR BIOLOGICAL APPLICATIONS

<130> 1721-18

<140> 09/403,980

<141> 2000-01-19

<150> PCT/FR98/00883

<151> 1998-04-30

<150> FR 97/05411

<151> 1997-04-30

<150> FR 98/00927

<151> 1998-01-28

<160> 44

<170> PatentIn Ver. 2.1

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<213> Mus musculus

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<222> (138)..(398)

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taagtcccgt acaggcc cag agt gac act ttc cca aga tgc gac tgt tct 170

Gln Ser Asp Thr Phe Pro Arg Cys Asp Cys Ser

1

5

10

tcc gtg agc cct ggt gta ctg tct ggg att gtt ctg ggt gac ttg gtg 218

Ser Val Ser Pro Gly Val Leu Ser Gly Ile Val Leu Gly Asp Leu Val

15

20

25

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35

40

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 Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg His Glu Val
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 tac agt gac ctc aac aca cag agg caa tat tac aga tgagcccact 408
 Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
 80 85
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 35 40 45
 Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu Ser Pro
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 Tyr Gln Glu Leu Gln Gly Gln Arg His Glu Val Tyr Ser Asp Leu Asn
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 <213> Mus musculus

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<213> Mus musculus

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gactgagtcg ccttatcagg agcttcaggg tcagagacca gaagtataca gtgacctcaa 360
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ttatcaggag cttcagggtc agagacctga agtatacagt gacctcaaca cacagaggcg 300
atattacaga tgagcccact ctatgcccat cagcggcctg atgcccgat ccggtcattc 360
cagatgccta ctcaacaagc ctttctgtgg gatcaggact cccgttggaa tacagatcca 420
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<213> Mus musculus

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<221> MOD_RES

<222> (133)

<223> Any amino acid

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 35 40 45
 Thr Phe Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ser
 50 55 60
 Gly Ile Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala
 65 70 75 80
 Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Gly Thr Ala Glu
 85 90 95
 Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu
 100 105 110
 Leu Gln Gly Gln Arg His Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg
 115 120 125
 Gln Tyr Tyr Arg Xaa Ala His Ser Met Pro Ile Ser Gly Leu Met Pro
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 Gly Leu Pro Leu Glu Tyr Arg Ser Thr Gly Tyr
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 <212> PRT
 <213> Mus musculus

<220>
 <221> MOD_RES
 <222> (120)
 <223> Any amino acid

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 20 25 30
 Gln Ser Asp Thr Phe Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly
 35 40 45
 Val Leu Ala Gly Ile Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile
 50 55 60
 Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Gly
 65 70 75 80

Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu Ser Pro
85 90 95

Tyr Gln Glu Leu Gln Gly Gln Arg Pro Glu Val Tyr Ser Asp Leu Asn
100 105 110

Thr Gln Arg Gln Tyr Tyr Arg Xaa Ala His Ser
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<210> 13
<211> 124
<212> PRT
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<222> (106)
<223> Any amino acid

<400> 13
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Gln Ala Gln Ser Asp Thr Phe Pro Arg Cys Gly Cys Ser Ser Val Ser
20 25 30

Pro Gly Val Leu Ala Gly Ile Val Leu Gly Asp Leu Val Leu Thr Leu
35 40 45

Leu Ile Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly
50 55 60 1

Gln Gly Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu
65 70 75 80

Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg His Glu Val Tyr Ser Asp
85 90 95

Leu Asn Thr Gln Arg Gln Tyr Tyr Arg Xaa Ala His Ser Met Pro Ile
100 105 110

Ser Gly Leu Met Pro Gly Ser Gly His Ser Arg Cys
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<210> 14
<211> 133
<212> PRT
<213> Mus musculus

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<222> (128)
<223> Any amino acid

<400> 14

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Ser Gly Ala Ser Trp Cys Leu Leu Phe Leu Pro Val Leu Leu Thr Val
20 25 30

Gly Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe Pro Arg Cys
35 40 45

Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile Val Leu Gly
50 55 60

Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Tyr Ser Leu Gly
65 70 75 80

Arg Leu Val Ser Arg Gly Gln Gly Thr Ala Glu Gly Thr Arg Lys Gln
85 90 95

His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
100 105 110

Pro Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg Xaa
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Ala Thr Leu Cys Pro
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<211> 160

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<222> (104)

<223> Any amino acid

<220>

<221> MOD_RES

<222> (145)

<223> Any amino acid

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<222> (148)

<223> Any amino acid

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<221> MOD_RES

<222> (157)

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		35					40				45							
Ala	Leu	Ala	Val	Tyr	Ser	Leu	Gly	Arg	Leu	Val	Ser	Arg	Gly	Gln	Gly			
		50				55					60							
Thr	Ala	Glu	Gly	Thr	Arg	Lys	Gln	His	Ile	Ala	Glu	Thr	Glu	Ser	Pro			
		65			70					75					80			
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			85					90						95				
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Leu	Met	Pro	Gly	Ser	Gly	His	Ser	Arg	Cys	Leu	Leu	Asn	Lys	Pro	Phe			
		115					120					125						
Cys	Gly	Ile	Arg	Thr	Pro	Val	Gly	Ile	Gln	Ile	His	Arg	Val	Pro	Pro			
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<220>
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 ctggtgtact gketgggatt gttctgggtg acttggtggt gactctgctg attgccctgg 240
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 aacaacacat tgctgagact gagtcgcctt atcaggagct tcagggtcag agacmwgaag 360
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 <212> PRT
 <213> Artificial Sequence

<220>
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<221> MOD_RES

<222> (108)

<223> Any amino acid

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35 40 45

Thr Leu Leu Ile Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser
50 55 60

Arg Gly Gln Gly Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu
65 70 75 80

Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg Pro Glu Val Tyr
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Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg Xaa Ala His Ser Met
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Pro Ile Ser Gly Leu Met Pro Gly Ser Gly His Ser Arg Cys
115 120 125

<210> 18

<211> 2838

<212> DNA

<213> Mus musculus

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<210> 19
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

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<220>
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<220>
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<210> 22
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<220>
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<400> 22
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<210> 23
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<210> 25
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<210> 26
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<220>
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<212> DNA
<213> Mus musculus

<220>
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<222> (1)..(333)

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ctg act gtg gag gga tta agt ccc gta cag gcc cag agt gac act ttc 96
Leu Thr Val Glu Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe
20 25 30

cca aga tgc gac tgt tct tcc gtg agc cct ggt gta ctg gct ggg att 144
Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile
35 40 45

gtt ctg ggt gac ttg gtg ttg act ctg ctg att gcc ctg gct gtg tac 192
Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Tyr
50 55 60

tct ctg ggc cgc ctg gtc tcc cga ggt caa gag agg acc cgg aaa caa 240
Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln
65 70 75 80

cac att gct gag act gag tcg cct tat cag gag ctt cag ggt cag aga 288
His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
85 90 95

cat gaa gta tac agt gac ctc aac aca cag agg caa tat tac aga 333
His Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
100 105 110

tgagcccact ctatgcccac cagcggcctg atgcccggat ccggtcattc cagatgccta 393
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<210> 28
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<212> PRT
<213> Mus musculus

<400> 28
Met Gly Ala Leu Glu Pro Ser Trp Cys Leu Leu Phe Leu Pro Val Leu
1 5 10 15
Leu Thr Val Glu Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe
20 25 30
Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile
35 40 45
Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Tyr
50 55 60
Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln
65 70 75 80
His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
85 90 95
His Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
100 105 110

<210> 29
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 29
ccgctcgagg gcttcatggg gggacttgaa c

31

<210> 30
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 30
ctagtctaga ggatccaggt atcattgtgc tgactgtcat gattcg

46

<210> 31
<211> 431
<212> DNA
<213> Mus musculus

<400> 31
 ggcttcgttt tctgttctgc gccgttacag atccaagctc ctgaggggt tcatgggggg 60
 acttgaaccc tgcagcaggc tcctgtcctt gcctctcctg ctggctgtaa gtggtctccg 120
 tcctgtccag gcccaggccc agagcgattg cagttgctct acggtgagcc cgggcgtgct 180
 ggcagggatc gtgatgggag acctggtgct gacagtgtc attgccctgg ccgtgtactt 240
 cctggggccgg ctgggtccctc gggggcgagg ggctgcggag gcagcgaccc ggaaacagcg 300
 tatcactgag accgagtcgc cttatcagga gctccagggt cagaggtcgg atgtctacag 360
 cgacctcaac acacagaggc cgtattacaa atgagcccga atcatgacag tcagcacaat 420
 gatacctgga t 431

<210> 32
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 32
 Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 1 5 10 15

<210> 33
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 33
 Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 1 5 10 15

<210> 34
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 34
 Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
 1 5 10 15

<210> 35
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 35

Tyr	Gln	Pro	Leu	Lys	Asp	Arg	Glu	Asp	Asp	Gln	Tyr	Ser	His	Leu
1				5				10						15

<210> 36

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 36

Tyr	Gln	Pro	Leu	Arg	Asp	Arg	Asp	Asp	Ala	Gln	Tyr	Ser	His	Leu
1				5				10						15

<210> 37

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 37

Tyr	Glu	Pro	Ile	Arg	Lys	Gly	Gln	Arg	Asp	Leu	Tyr	Ser	Gly	Leu
1				5				10						15

<210> 38

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 38

Tyr	Glu	Asp	Ile	Ser	Arg	Gly	Leu	Gln	Gly	Thr	Tyr	Gln	Asp	Val
1				5				10						15

<210> 39

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 39

Tyr	Glu	Gly	Leu	Asp	Ile	Asp	Gln	Thr	Ala	Thr	Tyr	Glu	Asp	Ile
1				5				10						15

<210> 40

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 40

Tyr	Thr	Gly	Leu	Asp	Thr	Arg	Asn	Gln	Glu	Thr	Tyr	Glu	Thr	Leu
1				5				10						15

<210> 41

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 41

Tyr	Glu	Glu	Leu	Asn	Ile	Tyr	Ser	Ala	Thr	Tyr	Ser	Glu	Leu
1				5				10					

<210> 42

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 42

Tyr	Gln	Glu	Leu	Gln	Gly	Gln	Arg	His	Glu	Val	Tyr	Ser	Asp	Leu
1				5				10						15

<210> 43

<211> 109

<212> PRT

<213> Mus musculus

<400> 43

Met Gly Ala Leu Glu Pro Ser Trp Cys Leu Leu Phe Leu Pro Val Leu
 1 5 10 15
 Leu Thr Val Leu Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe
 20 25 30
 Pro Arg Cys Asp Cys Ser Ser Val Pro Gly Val Leu Ala Gly Ile Val
 35 40 45
 Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Tyr Ser Leu
 50 55 60
 Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln His Ile
 65 70 75 80
 Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg Pro Glu
 85 90 95
 Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
 100 105

<210> 44
 <211> 111
 <212> PRT
 <213> Mus musculus

<400> 44
 Met Gly Ala Leu Glu Pro Ser Trp Cys Leu Leu Phe Leu Pro Val Leu
 1 5 10 15
 Leu Thr Val Glu Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe
 20 25 30
 Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile
 35 40 45
 Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Ile
 50 55 60
 Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln
 65 70 75 80
 His Ile Ala Arg Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
 85 90 95
 Pro Glu Val Tyr Ser Asp Leu Arg Thr Gln Arg Gln Tyr Tyr Arg
 100 105 110